b.) Remarks

The claims have been amended in order to recite the present invention with the specificity required by statute. Additionally, new claim 22 is presented in order to more specifically recite various preferred embodiments of the present invention. Accordingly, no new matter has been added.

Regarding an initial formal matter, the Examiner is requiring submission of certified copies of PCT/JP97/04468 and JP 8-325763. The basis for this is unclear, the present case is a CIP of 09/090,672 and a certified copy of the JP 8-325763 document was filed in the '672 application on August 10, 1998. Clarification is respectfully requested. As to PCT/JP97/04468, a certified copy is being obtained and will be filed in the '672 application as soon as possible.

Claims 4, 6, 8, 9, 14-17, 20 and 21 are withdrawn as being directed towards non-elected inventions. In response, claims 8, 9, 14-17, 20 and 21 have been cancelled. Rejoinder of claim 4 and 6 is respectfully requested upon allowance of an elected antecedent claim.

Claims 10-13 are objected to as depending from claims directed to non-elected inventions. In response, claim 10 has been rewritten in independent form.

Claims 1, 5, 7, 10-13, 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim subject matter regarded as the invention. The Examiner's bases of rejection have all been addressed by the above amendment.

Claims 1-3, 5, 7, 10, 12, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Rouault (*PNAS* Vol. 87 (1990) 7958-62). Claims 1-5, 7, 18 and 19 are also rejected as anticipated by Genbank entry M58511 and claims 1-3, 5, 7, 10-13, 18 and 19 are rejected as anticipated by Samaneigo (*JBC* Vol. 269, No. 49 (1994), 30904-10). This rejection is respectfully traversed in view of the foregoing amendment, as discussed below.

Rouault and Samaniego, relied upon by the Examiner, are the references underlying GenBank entry M58511. That is to say, the nucleotide sequence of IRP-2 cDNA and the amino acid sequence of IPR2 in these references are the same sequences disclosed in GenBank M58511.

In contrast, claim 1 recites a DNA comprising a nucleotide sequence represented by SEQ ID NO:7, and claim 3 recites a DNA consisting of a nucleotide sequence represented by SEQ ID NO:45 or NO:46. Claim 10 recites an isolated DNA encoding a protein comprising the amino acid sequence represented by SEQ ID NO:40.

For the Examiner's convenience, comparison of the nucleotide sequences of SEQ ID NO:7 and M58511 is shown at Tab A. As readily seen, the nucleotide sequence at positions 1-1023 in SEQ ID NO:7 corresponds to positions 1-1023 in M58511, and the nucleotide sequence at positions 1024-1197 in M58511 corresponds to positions 3833-4006 in SEQ ID NO:7. However, the nucleotide sequence at positions 1024-3832 in SEQ ID NO:7 is not taught by M58511.

The DNA consisting of the nucleotide sequence represented by SEQ ID NO:45 or NO:46 in claim 3 is also not taught or suggested by the prior art.

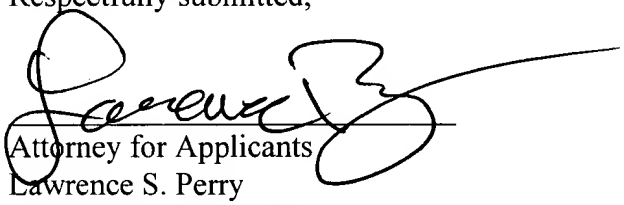
Similarly, as shown at Tab B, the amino acid sequence represented by SEQ ID NO:40 has, at the C-terminal, two amino acids (valine (V) and serine (S)) which are not taught or suggested by M58511.

In view of the above amendments and remarks, Applicants submit that all of the Examiner's concerns are now overcome and the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 1, 3, 4, 6, 10-13 and 22 remain presented for continued prosecution.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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LSP\ac

NY_MAIN 457053v1

nucleotide sequence of SEQ ID NO:7

Underlined (__, __) sequences are identical with underlined sequences of GenBank M58511 shown in the page 2.

atggacgccccaaaagcaggatacgcctttgagtaccttattgaaacattaaatgacagttcacataagaagttcttcgatgtatctaaacttggcacca 100
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nucleotide sequence of GenBank M58511

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comparison amino acid sequence of SEQ ID NO: 40 with amino acid sequence of GenBank M58511

```
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SEQ ID NO:40  RNCDGFLMKKEDVMNILDWKTKQSNVEVPFFPARVLLQDFTGIPAMVDFA 100
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M58511        RNCDGFLMKKEDVMNILDWKTKQSNVEVPFFPARVLLQDFTGIPAMVDFA 100

SEQ ID NO:40  AMREAVKTLGGDPEKVHPACPTDLTVDHSLQIDFSKCAIQNAPNPGGGDL 150
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M58511        AMREAVKTLGGDPEKVHPACPTDLTVDHSLQIDFSKCAIQNAPNPGGGDL 150

SEQ ID NO:40  QKAGKLSPLKVQPKKLPCRGQTTCRGSCDSGELGRNSGTFSSQIENTPIL 200
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M58511        QKAGKLSPLKVQPKKLPCRGQTTCRGSCDSGELGRNSGTFSSQIENTPIL 200

SEQ ID NO:40  CPFHLQPVPEPETVLKNQEVEFGRNRERLQFFKWSSRVLKNVAVIPPGTG 250
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SEQ ID NO:40  MAHQINLEYLSRVVFEEKDLLFPDSVVGTDSHITMVNGLGILGWGVGGIE 300
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M58511        KFVEFFGSGVSQLSIVDRTTIANMCPEYGAILSFFPVDNVTLKHLEHTGF···
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· shows identical amino acid sequence between SEQ ID NO:40 and M58511